AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A wireless communication network comprising:

a plurality of nodes, each having at least one dynamically directionally controllable communications link, wherein each of the dynamically directionally controllable communications links comprises an electronic scanning antenna adapted to provide a narrow-angle beam for transmitting communications signals via the communications link and a wide-angle beam for acquiring the communications link; and

a network controller for dynamically changing the direction of the controllable communications links of the nodes to enable transmission of signals between the nodes.

2. (Cancelled)

3. (Original) The wireless communication network of claim 1, wherein selected ones of the nodes further include an additional dynamically directionally controllable communications link.

4. (Original) The wireless communication network of claim 1, further comprising:

a low data rate signaling channel for transmitting control information from the network controller to the nodes.

5. (Currently Amended) The wireless communication network of claim 4, wherein the signaling channel includes:

~~a~~ the wide-angle ~~antenna beam at each of the nodes.~~

6. (Cancelled)

7. (Original) The wireless communication network of claim 1, wherein the network controller changes the direction of the controllable communications links during a guard interval between the transmission and reception of information signals between pairs of the nodes.

8. (Original) The wireless communication network of claim 1, wherein each of the nodes includes:

an antenna producing at least one dynamically directionally controllable beam.

9. (Original) The wireless communication network of claim 8, wherein each of the dynamically directionally controllable beams is a narrow beam.

10. (Original) The wireless communication network of claim 1, further comprising:

means for connecting one of said nodes to a backbone circuit.

11. (Original) The wireless communication network of claim 1, wherein at least one of said nodes is a satellite; and at least one other of said nodes is a ground station.

12. (Currently Amended) A method for transmitting communications signals comprising the steps of:

providing a plurality of nodes ~~for receiving communications signals~~, each having at least one dynamically directionally controllable communications link, wherein each of the dynamically directionally controllable communications links comprises an electronic scanning antenna adapted to provide a narrow-angle beam for transmitting communications signals via the communications link and a wide-angle beam for acquiring the communications link; and

dynamically changing the direction of the controllable communications links of the nodes

to enable transmission of the communications signals between the nodes.

13. (Original) The method of claim 12, further comprising the step of:

transmitting control information from the network controller to the nodes on a low data rate control channel.

14. (Cancelled)

15. (Original) The method of claim 12, wherein the network controller changes the direction of the controllable communications links during a guard interval between the transmission and reception of information signals between pairs of the nodes.

16. (Original) The method of claim 12, further comprising the step of:

connecting one of said nodes to a backbone circuit.

17. (Original) The method of claim 12, further comprising the steps of:

dynamically spreading the communications signal over multiple routes among the nodes; and

reassembling the communications signal at a predetermined node.

18. (Currently Amended) A wireless communication network comprising:

a hub node having at least one dynamically directionally controllable communications link, ~~wherein each of the dynamically directionally controllable communications links comprises~~ and comprising an electronic scanning antenna adapted to provide a narrow-angle beam for transmitting communications signals via the communications link and a wide-angle beam for acquiring the communications link;

a plurality of remote nodes; and

a network controller for dynamically controlling the direction of the communications link to enable transmission of signals between the hub node and the remote nodes.

19. (Cancelled)

20. (Original) The wireless communication network of claim 18, wherein the hub node further includes an additional dynamically directionally controllable communications link.

21. (Original) The wireless communication network of claim 18, further comprising:

a low data rate signaling channel for transmitting control information from the network controller to the hub node.

22. (Currently Amended) The wireless communication network of claim 21, wherein the signaling channel includes:

~~a~~ the wide-angle ~~antenna beam at the hub node~~.

23. (Cancelled)

24. (Original) The wireless communication network of claim 18, wherein the network controller changes the direction of the controllable communications links during a guard interval between the transmission and reception of information signals between pairs of the nodes.

25. (Original) The wireless communication network of claim 18, wherein the hub node includes:

an antenna producing at least one dynamically directionally controllable beam.

26. (Cancelled)

27. (Original) The wireless communication network of claim 18, further comprising:

means for connecting one of said hub nodes and said remote nodes to a backbone circuit.

28. (Original) The wireless communication network of claim 18, wherein at least one of said remote nodes is a satellite; and the hub node is a ground station.

29. (Currently Amended) A method for transmitting communications signals comprising the steps of:

providing a hub node ~~for receiving communications signals, the hub node~~ having at least one dynamically directionally controllable communications link, said communications link including at least one continuous electronic scanning antenna adapted to provide a narrow-angle beam for transmitting communications signals via the communications link and a wide-angle beam for acquiring the communications link;

providing a plurality of remote nodes for exchanging ~~the communications~~ signals with the hub node; and

dynamically changing the direction of the controllable communications links of the hub node to enable transmission of the communications signals between the hub node and the remote nodes.

30. (Original) The method of claim 29, further comprising the step of:

transmitting control information from the network controller to the hub node on a low data rate control channel.

31. (Cancelled)

32. (Original) The method of claim 29, wherein the network controller changes the direction of the controllable communications link during a guard interval between the transmission and reception of information signals between the hub node and one of the remote nodes.

33. (Original) The method of claim 29, further comprising the step of:

connecting one of the hub node and the remote nodes to a backbone circuit.

34. (Original) The method of claim 12, further comprising the steps of:

separating a message transmitted by the communications signals into segments; and

distributing the segments to different ones of the nodes; and

reconstructing the message at a destination node.

35. (Currently Amended) A wireless communication network comprising:

a plurality of nodes, each of said plurality of nodes having at least one electronic scanning antenna adapted to provide a narrow-angle beam for transmitting communications signals via a controllable communications link and a wide-angle beam for acquiring the communications link; and

a network controller for dynamically changing the direction of the controllable communications links of the nodes to enable transmission of signals between the nodes.

36. (New) The wireless communication network of claim 1, wherein said electronic scanning antenna is continuous scanning and includes phase shifters.

37. (New) The wireless communication network of claim 2, wherein said phase shifters

are analog phase shifters and the communication can be bi-directional.

38. (New) The method of claim 12, wherein said electronic scanning antenna includes phase shifters.

39. (New) The wireless communication network of claim 18, wherein said electronic scanning antenna includes phase shifters.

40. (New) The wireless communication network of claim 18, wherein said phase shifters are analog phase shifters.

41. (New) The wireless communication network of claim 18, wherein said electronic scanning antenna is a continuous electronic scanning antenna.

42. (New) The method of claim 29, wherein said continuous electronic scanning antenna includes at least one analog phase shifter.